CSDF 44

CCAB 46

26 DATA NETWORK (LTS) 42

NMP 52 48 56

30 24 ASG 54 50

ISPs 20

18 INTERNET

TNT 32

SS7 NETWORK 28 36 34 33

ILEC CLASS 5 38

ILEC SUBSCRIBER 16

12 66 68 ALARMS 22 64 62 60 58

Fig. 1

LTS 42

66 ALARMS 24

NMP (CALL COLLECTION) 24

30 SS7 GATEWAY 64

Fig. 2

```
           ( START )
               │
               ▼
  ┌──────────────────────────┐
  │  PROVIDING  SIGNALING  GATEWAY  │─── S1
  │   AND  NETWORK  PROCESSOR  │
  └──────────────────────────┘
               │
               ▼
  ┌──────────────────────────┐
S2 ─│  COLLECTING  CALL  BILLING  DATA  │
  │    WITH  SIGNALING  GATEWAY  │
  └──────────────────────────┘
               │
               ▼
  ┌──────────────────────────┐
  │  TRANSFERRING  DATA  FROM  SIGNALING  │
  │  GATEWAY  TO  NETWORK  PROCESSOR  │─── S3
  └──────────────────────────┘
               │
               ▼
  ┌──────────────────────────┐
S4 ─│  CONVERTING  CALL  BILLING  DATA  WITH  NETWORK  │
  │  PROCESSOR  FROM  FIRST  DATA  STRUCTURE  │
  │  FORMAT  TO  SECOND  DATA  STRUCTURE  FORMAT  │
  └──────────────────────────┘
               │
               ▼
  ┌──────────────────────────┐
  │  ROUTING  CONVERTED  CALL  BILLING  │─── S5
  │   DATA  TO  A  DATA  NETWORK  │
  └──────────────────────────┘
               │
               ▼
           ( END )
```

FIG. 3